AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An image display method, which has an output brightness characteristic in which a logarithmic value of an output brightness becomes smaller as a value of an input image signal becomes larger, for displaying a visible image that said input image signal represents according to said output brightness characteristic, the image display method comprising the step of:

setting said output brightness characteristic so that a rate of change, which represents a change in a logarithmic value of said output brightness with respect to a change in the value of said input image signal ~~value~~, in a ~~low signal value~~ first region of said image signal which is below a boundary value S_a becomes smaller than that in ~~an intermediate and high signal value~~ a second region of said input image signal which is above a boundary value S_a;

wherein [[a]] the boundary value S_a between the ~~low signal value~~ first region and the ~~intermediate and high signal value~~ second region is represented by the following equation:

$$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$$

where S_{max} is the maximum value of the image signal in the output brightness ~~charasteristic~~ characteristic.

2. (currently amended): The image display method as set forth in claim 1, wherein said output brightness characteristic is approximately linear over approximately the entire ~~intermediate and high signal value~~ second region.

3. (currently amended): The image display method as set forth in claim 1, wherein ~~a boundary value S_a between said low signal value region and said intermediate and high signal value region, and~~ a logarithmic value $Y(S_a)$ of said output brightness at said boundary value S_a [[are]] is represented by the following equation[[s]]:

~~$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$~~

$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$

where ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

4. (currently amended): The image display method as set forth in claim 2, wherein ~~a boundary value S_a between said low signal value region and said intermediate and high signal value region, and~~ a logarithmic value $Y(S_a)$ of said output brightness at said boundary value S_a [[are]] is represented by the following equation[[s]]:

~~$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$~~

$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$

where ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

5. (currently amended): The image display method as set forth in claim 1, wherein said change rate in said ~~intermediate and high signal value~~ second region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

where ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ G is said change rate.

C1

6. (currently amended): The image display method as set forth in claim 2, wherein said change rate in said ~~intermediate and high signal value~~ second region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

where ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ G is said change rate.

7. (currently amended): The image display method as set forth in claim 3, wherein said change rate in said ~~intermediate and high signal value~~ second region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

where ~~Smax is the maximum value of the image signal in said output brightness characteristic and~~ G is said change rate.

8. (currently amended): The image display method as set forth in claim 1, wherein said output brightness characteristic is set so that said change rate in ~~the high signal value~~ a first portion of the second region of said image signal becomes greater than that in ~~the intermediate signal value~~ a second portion of the second region of said image signal.

C1

9. (currently amended): The image display method as set forth in claim 8, wherein said output brightness characteristic is approximately linear over approximately the entire ~~intermediate signal value~~ second portion of the second region and over approximately the entire ~~high signal value~~ first portion of the second region.

10. (currently amended): The image display method as set forth in claim 8, wherein ~~a boundary value S_a between said low signal value region and said intermediate and high signal value region,~~ a logarithmic value $Y(S_a)$ of said output brightness at said boundary value S_a, a boundary value S_b between said ~~intermediate signal value~~ second portion of the second region and said ~~high signal value~~ first portion of the second region, and a logarithmic value $Y(S_b)$ of said output brightness at said boundary value S_b are represented by the following equations:

~~$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$~~

$0.70 \times S_{max} \leqq S_b \leqq 1.00 \times S_{max}$

$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$

$Y_{max} - 2.15 \leqq Y(S_b) \leqq Y_{max} - 1.95$

where ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

11. (currently amended): The image display method as set forth in claim 9, wherein ~~a boundary value S_a between said low signal value region and said intermediate and high signal value region,~~ a logarithmic value $Y(S_a)$ of said output brightness at said boundary value S_a, a boundary value S_b between said ~~intermediate signal value~~ second portion of the second region and said ~~high signal value~~ first portion of the second region, and a logarithmic value $Y(S_b)$ of said output brightness at said boundary value S_b are represented by the following equations:

$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$

$0.70 \times S_{max} \leqq S_b \; 1.00 \times S_{max}$

$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$

$Y_{max} - 2.15 \leqq Y(S_b) \leqq Y_{max} - 1.95$

where ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

12. (currently amended): The image display method as set forth in claim 8, wherein said change rate in said ~~intermediate signal value~~ second portion of the second region is represented by the following equation:

$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$

where ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ G is said change rate.

13. (currently amended): The image display method as set forth in claim 9, wherein said change rate in said ~~intermediate signal value~~ second portion of the second region is represented by the following equation:

$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$

where ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ G is said change rate.

14. (currently amended): The image display method as set forth in claim 10, wherein said change rate in said ~~intermediate signal value~~ second portion of the second region is represented by the following equation:

$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$

where ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ G is said change rate.

15. (currently amended): In an image display unit, which comprises a brightness circuit having an output brightness characteristic in which a logarithmic value of an output brightness becomes smaller as a value of an input image signal becomes larger, for displaying a visible image that said input image signal represents according to said output brightness characteristic,

the improvement wherein said output brightness characteristic in said brightness circuit is set so that a rate of change, which represents a change in the logarithmic value of said output brightness with respect to a change in said input image signal value, in a ~~low signal value~~ first region of said image signal which is below a boundary value S_a becomes smaller than that in ~~an intermediate and high signal value~~ second region of said input image signal which is above a boundary value S_a;

wherein [[a]] the boundary value S_a between the ~~low signal value~~ first region and the ~~intermediate and high signal value~~ second region is represented by the following equation:

$$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$$

where S_{max} is the maximum value of the image signal in the output brightness ~~charasteristic~~ characteristic.

16. (currently amended): The image display unit as set forth in claim 15, wherein said output brightness characteristic in said brightness circuit is approximately linear over approximately the entire ~~intermediate and high signal value~~ second region.

17. (currently amended): The image display unit as set forth in claim 15, wherein ~~a boundary value S_a between said low signal value region and said intermediate and high signal value region, and~~ a logarithmic value Y (S_a) of said output brightness at said boundary value S_a [[are]] is represented by the following equation[[s]]:

~~$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$~~

$$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$$

in which ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

18. (currently amended): The image display unit as set forth in claim 16, wherein ~~a boundary value S_a between said low signal value region and said intermediate and high signal value region, and~~ a logarithmic value Y (S_a) of said output brightness at said boundary value S_a [[are]] is represented by the following equations:

~~$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$~~

C1 $Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$

in which ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

19. (currently amended): The image display unit as set forth in claim 15, wherein said change rate in said ~~intermediate and high signal value~~ second region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

in which ~~Smax is the maximum value of the image signal in said output brightness characteristic and~~ G is said change rate.

20. (currently amended): The image display unit as set forth in claim 16, wherein said change rate in said ~~intermediate and high signal value~~ second region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

in which ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ G is said change rate.

21. (currently amended): The image display unit as set forth in claim 17, wherein said change rate in said ~~intermediate and high signal value~~ second region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

in which ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ G is said change rate.

22. (currently amended): The image display unit as set forth in claim 15, wherein said output brightness characteristic in said brightness circuit is set so that said change rate in the ~~high signal value~~ first portion of the second region of said image signal becomes larger than that in the ~~intermediate signal value~~ second portion of the second region of said image signal.

23. (currently amended): The image display unit as set forth in claim 22, wherein said output brightness characteristic in said brightness circuit is approximately linear over

approximately the entire ~~intermediate signal value~~ second portion of the second region and over approximately the entire ~~high signal value~~ first portion of the second region.

24. (currently amended): The image display unit as set forth in claim 22, wherein ~~a boundary value S_a between said low signal value region and said intermediate and high signal value region,~~ a logarithmic value $Y(S_a)$ of said output brightness at said boundary value S_a, a boundary value S_b between said ~~intermediate signal value~~ second portion of the second region and said ~~high signal value~~ first portion of the second region, and a logarithmic value $Y(S_b)$ of said output brightness at said boundary value S_b are represented by the following equations:

C1

~~$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$~~

$$0.70 \times S_{max} \leqq S_b \leqq 1.00 \times S_{max}$$

$$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$$

$$Y_{max} - 2.15 \leqq Y(S_b) \leqq Y_{max} - 1.95$$

in which ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

25. (currently amended): The image display unit as set forth in claim 23, wherein ~~a boundary value S_a between said low signal value region and said intermediate and high signal value region,~~ a logarithmic value $Y(S_a)$ of said output brightness at said boundary value S_a, a boundary value S_b between said ~~intermediate signal value~~ second portion of the second region

and said ~~high signal value~~ first portion of the second region, and a logarithmic value Y (S_b) of said output brightness at said boundary value S_b are represented by the following equations:

~~$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$~~

$0.70 \times S_{max} \leqq S_b \leqq 1.00 \times S_{max}$

$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$

$Y_{max} - 2.15 \leqq Y(S_b) \leqq Y_{max} - 1.95$

in which ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

C\

26. (currently amended): The image display unit as set forth in claim 22, wherein said change rate in said ~~intermediate signal value~~ second portion of the second region is represented by the following equation:

$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$

in which ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ G is said change rate.

27. (currently amended): The image display unit as set forth in claim 23, wherein said change rate in said ~~intermediate signal value~~ second portion of the second region is represented by the following equation:

$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$

in which ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ G is said change rate.

28. (currently amended): The image display unit as set forth in claim 24, wherein said change rate in said ~~intermediate signal value~~ second portion of the second region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

in which ~~S_{max} is the maximum value of the image signal in said output brightness characteristic and~~ G is said change rate.